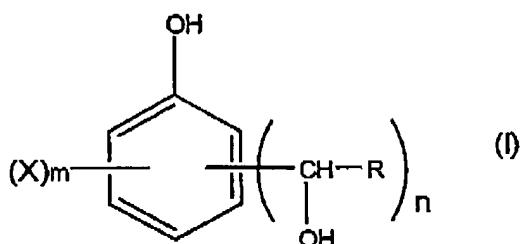


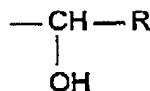
Docket 2000FR302
 Serial No. 09/778,353
 Group 1621

1. (currently amended) New phenolic compounds derived from dialkoxyethanals of formula (I)



in which

- R is a dialkoxyethyl group with from 3 to 17 carbon atoms, a 1,3-dioxolan-2-yl group optionally substituted on peaks 4 and/or 5 by one or more alkyl groups comprising from 1 to 8 carbon atoms or a 1,3-dioxan-2-yl group optionally substituted on peaks 4 and/or 5 and/or 6 by one or more alkyl groups comprising from 1 to 8 carbon atoms,
- n has the value 1, 2 or 3 and the group or groups

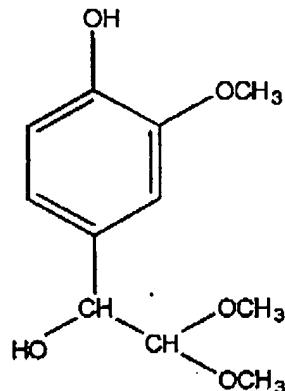


are in ortho and/or in para position of the OH group of the cycle

- m represents from 0 to 4-n and X represents a functional group such as selected from the group of: hydroxyl; or halogen; such as chlorine, fluorine, bromine, iodine or an alkyl or alkoxy group comprising from 1 to 8 carbon atoms; or aryl group comprising from 5 to 12 carbon atoms and optionally 1 or 2 heteroatoms such as nitrogen or oxygen; or carboxy; or a ---CO---Y group in which Y represents an alkyl or alkoxy radical containing from 1 to 8 carbon atoms or amido or amino or thiol radical, on condition that at least one of the ortho or para positions of the phenolic cycle is substituted by a hydrogen, with the

Docket 2000FR302
Serial No. 09/778,353
Group 1621

exception of the compound 1

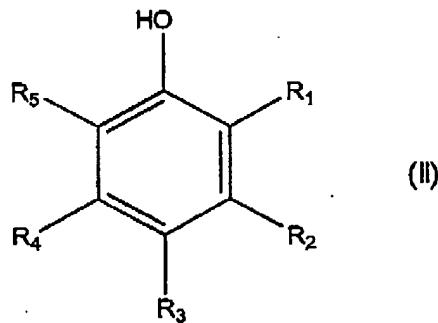


1

and or their salts with the alkali metals, alkaline-earth metals and amines.

2. (currently amended) Preparation process for phenolic compounds of formula (I) according to claim 1, and or their salts with the alkali metals, alkaline-earth metals and amines characterized by the fact that comprising the steps of:

- reacting a phenol of formula (II)

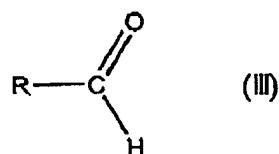


in which R₁, R₂, R₃, R₄, R₅ can be a are independantly selected from the group consisting of: hydroxyl radical; a halogen; such as chlorine, fluorine, bromine, iodine or an alkyl radical comprising from 1 to 8 carbon atoms; or an aryl radical; or an alkoxy radical comprising from 1 to 8 carbon atoms; or an ester radical

Docket 2000FR302
Serial No. 09/778,353
Group 1621

comprising from 1 to 8 carbon atoms; or an amide radical; or an amine radical or a thiol radical, on condition that at least one of the ortho or para positions of the phenolic cycle is substituted by a hydrogen;

- is reacted with an aldehyde of formula (III)



in which R is a dialkoxymethyl group, a 1,3-dioxolan-2-yl group optionally substituted on peaks 4 and/or 5 by one or more alkyl groups or a 1,3-dioxan-2-yl group optionally substituted on peaks 4 and/or 5 and/or 6 by one or more alkyl groups

- in the presence of a base.

3. (currently amended) Process according to claim 2, characterized by the fact that where 1 mole of phenol of formula (II) is reacted with 0.1 to 10 moles of aldehyde of formula (III) in the presence of 0.1 to 2 moles of base.

4. (currently amended) Process according to claim 3, characterized by the fact that where 1 mole of phenol of formula (II) is reacted with 0.1 to 5 moles of aldehyde of formula (III) in the presence of 0.1 to 1 mole of base.

5. (currently amended) Process according to claim 2, characterized in that the where said base is constituted by a tertiary amines.

6. (currently amended) Process according to claim 5, characterized in that the where said base is constituted by tributylamine or triethylamine.

Docket 2000FR302
Serial No. 09/778,353
Group 1621

7. (currently amended) Process according to claim 2, characterized in that the where said base is a hydroxide of alkali metal.
8. (currently amended) Process according to claim 7, characterized in that the where said base is constituted by sodium hydroxide or potassium hydroxide.
9. (currently amended) Process according to claim 2, characterized in that the where said base is a carbonate of alkali metal.
10. (currently amended) Process according to claim 9, characterized in that the where said base is sodium carbonate or potassium carbonate.
11. (currently amended) Process according to claim 2, characterized in that where the product of formula (III) is dimethoxyacetaldehyde, diethoxyacetaldehyde, dibutoxyacetaldehyde, 2-formyl-1,3-dioxolane or 5,5-dimethyl 2-formyl 1,3-dioxane.
12. (currently amended) Use of the A synthesis intermediate comprising phenolic compounds of formula (I) and or their salts with the alkali metals, alkaline-earth metals and amines, according to claim 1, as synthesis intermediate.
13. (currently amended) A process for the preparation of phenolic resins without formaldehyde comprising: synthesising a phenolic resin with Use of the phenolic compounds of formula (I) and or their salts with the alkali metals, alkaline-earth metals and amines, according to claim 1, as intermediate for the preparation of phenolic resins without formaldehyde.
14. (currently amended) A process for the crosslinking of polymers without formaldehyde comprising crosslinking said polymers with Use of the phenolic compounds of formula (I) and or their salts with the alkali metals, alkaline-earth metals and amines, according to claim 1, as crosslinker without formaldehyde.

Docket 2000FR302
Serial No. 09/778,353
Group 1621

15. (currently amended) A process for the crosslinking of a substrate without formaldehyde comprising crosslinking said substrate with use of the phenolic compounds of formula (I) and or their salts with the alkali metals, alkaline-earth metals and amines, according to claim 1, as crosslinker with a cellulose substrate, a non-woven substrate, of nylon, of polyester, of glass.

Add new claims as follows:

16. (new) The process of claim 15 wherein the substrate is selected from the group consisting of a cellulose substrate, a nylon substrate, a polyester substrate, and a glass substrate.

17. (new) The new phenolic compounds according to claim 1 where said halogen is selected from: chlorine, fluorine, bromine or iodine.